

REQUIREMENT 6:

Requirement 6: The revised plan must include a copy of the State's written "equity plan" for ensuring that poor or minority children are not taught by inexperienced, unqualified, or out-of-field teachers at higher rates than are other children.

Response

The State's Equity Plan is designed to bring cohesion by pooling resources and implementing several strategies to ensure that our poor and minority children are taught by experienced and highly qualified teachers. The State's Equity Plan is composed of eight components that address multiple strategies and programs to support the LEAs that have poor and minority students.

Data and Reporting Systems

The State of Indiana recognizes that it is crucial to use data and reporting systems to identify and correct inequities in teacher distribution in high-poverty/high-minority schools versus low-poverty/low-minority schools. Listed below is an inventory of what Indiana plans to do to identify and to correct inequities.

Teacher Experience Distribution

While Indiana is quickly moving toward 100 percent compliance with the HQ criteria established under NCLB, there may still be instances in which poor and minority children are taught at higher rates than other children by inexperienced teachers. Through its CE/CP data collection systems (electronic collection of data for certified employees and certified positions/classes taught), IDOE will analyze data on some additional teacher qualifications that are associated with teaching quality, thereby employing a more comprehensive definition of highly qualified teachers.

Based on the timeline presented in Attachment 1, Indiana plans to collect and analyze the data on an annual basis beginning with Spring 2007. All timeframes proposed to update fields and collect more complete data will go into effect during the months of March and April 2007; therefore, IDOE can begin analyzing the teacher experience distribution data in order to identify and enact efforts of support in Spring 2007.

As noted by the National Comprehensive Center for Teacher Quality, many researchers have documented that the least qualified teachers are most likely to be found teaching high-poverty, low-achieving, minority students (Carroll, Reichardt, & Guarino, 2000; Darling-Hammond, 2002; Goe, 2002; Hanushek, Kain, & Rivkin, 2004; Ingersoll, 2002; Lankford, Loeb, & Wyckoff, 2001; Useem & Farley, 2004). These underqualified teachers are typically located in hard-to-staff schools where turnover is frequent and openings are often filled with inexperienced and uncredentialed teachers.

Previous analysis of HQ data using the NCLB definition does not suggest that significant issues exist with regard to equitable teacher distribution throughout most Indiana school districts. However, according to the National Center for Education Statistics, 20 percent of teachers in high-poverty schools have three or fewer years of

teaching experience, compared with 11 percent of teachers in low-poverty schools. The research suggests that teachers are considerably more effective after completing two years on the job. In a recent study of teachers in New York City, researchers found that as teachers gained experience in their first three or four years, student performance increased. To ensure that poor and minority children are not taught at higher rates than other children by inexperienced teachers, Indiana will examine its distribution of teachers in districts and individual schools within districts based on years of teaching experience.

For the districts with the highest rates of poverty and numbers of minority students, Indiana will strive to increase the percentage of classes taught by highly qualified experienced teachers. Statewide data will be disaggregated to ascertain whether inequities occur in high-poverty schools across the state as compared with low-poverty schools, and in high-minority schools across the state as compared with low-minority schools. In districts with low-performing schools where significant inequities appear, the IDOE will ask districts, as part of their non-HQ Action Plan, to demonstrate how they will increase the percentages of high-poverty/high-minority students being taught by highly qualified experienced teachers by either:

- Demonstrating that there are proportionally more highly qualified experienced teachers in the district overall, thereby increasing the likelihood of any given student having a highly qualified experienced teacher; or
- Documenting that teachers have been redistributed (through transfer, incentives, reassignment, policy changes, etc.) in a manner that increases the percentages of experienced highly qualified teachers in low-performing high-poverty/high-minority schools.

Teacher Turnover Rates

High turnover among new teachers, up to 50 percent quit within the first five years, keeps schools staffed with untried novices lacking the skills needed to help students reach higher academic standards. Nationally, each year about 16 percent of teachers leave the schools in which they work, but teachers are almost twice as likely to leave high-poverty as low-poverty schools. (The National Center for Teacher Quality, June 2006)

The Indiana Department of Education's data system allows for a general collection on teacher turnover rates. On an annual basis, the State can review which teachers exited which schools in Indiana and in which content areas. In an effort to analyze trends over time, the IDOE will collect data during the 2006-07 school year and compare it with the 2005-06 data in order to begin looking at high volumes of turnover in schools on an annual basis. Once there are data to compare, the State will compare turnover rates in high-poverty schools with low-poverty schools, and also compare high-minority schools with low-minority schools. In districts with low-performing schools where significant inequities appear, IDOE will ask districts, as part of their non-HQ Action Plan, to determine what event(s) or reason(s) tended to lead to the departure of the teachers. The State can use this information to help schools address teacher turnover issues and to assist districts in the identification of strategies

for rewarding teachers who take on more challenging assignments.

As part of its technical assistance to help low-performing districts with high turnover rates, the IDOE will consider the following research. A 2004 study by Tom Smith and Richard Ingersoll shows that teachers who participate in an induction program are twice as likely to remain in teaching. Further, researchers found that new teachers' decisions to transfer out of low-income schools rested on the extent to which those schools supported them with well-matched mentors, guidance in using curriculum, and positive hiring processes (2004 report by the Harvard Project on the Next Generation of Teachers). According to a 2005 *Education Week* survey, only 16 states require and finance mentoring programs for their new teachers.

Teacher Preparation

In an effort to build a pipeline of prospective teachers for high-poverty, low-performing schools, the State has implemented a variety of programs. Descriptions of those programs follow.

FFEL and Direct Loan Programs and Perkins Loan Cancellation

Using federal funding, these programs provide student loan forgiveness and/or cancellation for teachers who commit to teaching in high-need schools for set amount of years (typically 3-5 years commitment). In Indiana, 1,258 schools were identified as low-income schools during both the 2004-2005 and 2005-2006 school years. Teacher shortage areas information was last reported for the 2004-2005 school year and included 16 subjects, with a majority of the subjects in mathematics, science, and special education. The population targeted to receive funding includes low income student populations as well as those teaching science, special education, and mathematics courses.

For more information, please see:

<http://studentaid.ed.gov/PORTALSWebApp/students/english/cancelperk.jsp?tab=repaying>

and <http://studentaid.ed.gov/PORTALSWebApp/students/english/cancelstaff.jsp?tab=repaying>

Transition to Teaching Permit: Alternate Route to Licensure

The transition to teaching allows superintendents to request a permit for an applicant in the designated subject area or in a designated school corporation if there is no qualified applicant or the candidate is the best qualified candidate for the position if the individual is enrolled in a transition to teaching preparation program. Typically, this represents high-need districts and math, science, and special education classrooms. For more information, please see the following Web site: www.doe.state.in.us/dps.

Transition to Teaching Grant (awarded in 2001 by USDE)

Although this federally funded program has expired, it is an example of the types of programs IDOE has implemented to build the pool of prospective teachers. This program used Title II, Part C Funds to fund university expenses for people interested in becoming teachers in the areas of mathematics, science, and special education. Four targeted urban schools were intended to benefit:

- Indianapolis Public Schools

- Gary Community Schools
- South Bend Community Schools
- Fort Wayne Community Schools

Because participation from two schools was below expectations, the balance of money was used to reduce the number of non-highly qualified teachers in IPS from approximately 120 to 50 as of the 2005-06 school year. For more information, please see the following Web site:

<http://www.ed.gov/programs/transitionteach/2001awards.html>.

Out-of-Field Teaching

The State has also implemented programs to reduce the incidence of out-of-field teaching (particularly in mathematics, science, special education, and bilingual education/English as a Second Language) in high-poverty, high-minority, and low-performing schools. The State programs are described below.

Troops to Teachers

Using funding from the federal Departments of Education and Defense, the *Troops to Teachers* is a national program that was established in 1994. Indiana began a state program in 2004, partnering with Michigan's state program. Program goals include providing funds to recruit, prepare, and support former members of the military services as teachers in high-poverty schools. Stipends are provided in amounts related to population served. Currently, there are thirty-five placements in Indiana.

Stipend amounts are directly related to population served.

- \$5,000 stipend to TTT serving "high-need LEA" – school with a poverty rate of at least 20 percent
- \$10,000 stipend to TTT serving "high-poverty school" – school with at least 50 percent low income student population

Preference in program selection given to educational or military experience in science, mathematics, special education, or vocational/technical subjects. For more information, please see this Web site: www.proudtoserveagain.com.

Improving Teacher Quality Partnership Program

Using federal Title II, Part A funds, the Indiana Commission for Higher Education uses grant monies to fund the *Improving Teacher Quality Partnership Program*, which builds partnerships between Higher Education Institutions and high need school districts intended to support the professional development of teachers and principals in core academic subjects. The targeted population includes high-need school districts. Please see the following Web site: www.che.state.in.us/grants/itqpp.shtml.

Recruitment and Retention of Experienced Teachers

The State has implemented multiple programs to help recruit and to retain experienced teachers. A summary of those programs are as follows.

Transition to Teaching Permit: Alternate Route to Licensure

This program is a shorter route to licensure described under “Teacher Preparation” is one way the State is working to recruit teachers.

Indiana’s Mentoring Program

Indiana has had a strong mentoring program in place since 1988. The Beginning Teacher Internship Program, implemented in 1988, which includes a one-year mentoring program was one of the first mentoring program in the United States. In 2003, Indiana adopted the Indiana Mentoring and Assessment Program. The mentoring component of this program is a two-year requirement. In the first year, the mentor, who is an experienced teacher trained in a standards based mentoring program, works closely with the beginning educator to ensure that s/he receives support during the challenge of the first year. In the second year, the mentor continues to support the beginning teacher, with the emphasis placed on assisting the teacher in the completion of a standards based portfolio assessment.

Research shows that a strong mentoring and assessment program enhances teacher retention. In addition, it provides a dynamic and relevant professional development program for the veteran teacher.

The new Indiana Mentoring and Assessment Program also provides beginning administrators and school service personnel the opportunity be supported by a veteran mentor.

Milken Teacher Advancement Program

Originally funded through Milken Family Foundation and now funded from the National Institute for Excellence in Teaching, this program strives to ensure high quality teachers in every classroom. Under this program, outstanding teachers earn higher salaries and advance professionally, which helps support retention. The program focuses on four elements: multiple career ladders, ongoing applied professional growth, instructionally focused accountability, and performance based compensation. For additional information, please see the following Web site: www.tapschools.org.

Professional Development

The State does have plans to strengthen the skills, knowledge, and qualifications of teachers already working in high-poverty, low-performing schools. In addition to the professional development and technical assistance opportunities referenced in previous requirements, the State also supports the initiatives that follow.

Indiana University Mathematics Initiative

Using National Science Foundation (through the NSF Math Science Partnership Program) funding, this program provides funding for programs designed to increase the capacity of school districts to deliver effective standards-based mathematics teaching by providing quality professional development. The targeted populations include the following schools of which the majority are urban, high-need settings:

- East Chicago Community Schools
- Fort Wayne Community Schools
- Elkhart Community Schools
- School City of Hammond
- Vigo County
- MSD of Pike
- MSD of Decatur
- Anderson Community Schools
- Bartholomew Community Schools

For more information, please see the following Web site: www.indiana.edu/~iucme.

Math and Science Partnership Program

Using Title II, Part B, the Mathematics and Science Partnership competitive grant program provides funds to encourage institutions of higher education and local school districts to participate in professional development activities that increase subject matter knowledge and teaching skills of mathematics and science teachers, Grades 6-12. The targeted populations include:

- Science Training Actively Reaches Students (STARS) – Southwestern Elementary School and Hanover College
- Reach for the Numbers – South Bend Community School Corporation and St. Mary's College
- M⁴ Making Math More Meaningful – Crawfordsville Community Schools and Purdue University
- Problem-Solving Through Discrete Mathematics – School City of East Chicago and Valparaiso University
- Initiative for Schools, Industries, and the Sciences for Elementary Teachers – School City of East Chicago and Valparaiso University
- Partnership to Ensure Success in Mathematics – Clarksville Community School Corporation and Indiana University Southeast
- BCSC Inquiry Base Science Initiative – Bartholomew Consolidated School Corporation and Indiana University-Purdue University Columbus
- Encouraging Technology and Hands-on Science in Elkhart – Elkhart Community Schools and Purdue University
- The Algebra Project – Fayette County School Corporation and Indiana University East
- Improving Inquiry and Standards-Based Elementary Science Instruction – Community Schools of Frankfort and Purdue University
- Enhancing Elementary Teachers' Knowledge and Skills for Teaching Inquiry-Based Science – Gary Community School Corporation and Purdue University
- Passport to Science – Indianapolis Public Schools and Ball State University
- Inquiry Learning for Students and Teachers – School City of Mishawaka and St. Mary's College
- Muncie Community Schools' Algebra Readiness Initiative – Muncie Community Schools and Ball State University
- Establishing a Culture of Inquiry: Expanding the Science Knowledge Base of Southern Indiana Elementary Teachers – Cannelton City Schools and

- Southern Indiana Education Center
- Vigo County Mathematics Initiative – Vigo County School Corporation and Indiana University

For more information, please see the following Web site:
<http://doe.state.in.us/esea/mathscience/profiles0405/welcome.html>.

Specialized Knowledge or Skills

The State plan supports efforts to ensure that teachers have the specialized knowledge and skills they need to be effective with the populations typically served in high-poverty, low-performing schools (including Native American students, African American students, English language learners, and other students at risk). A description of those efforts is summarized below.

The State of Indiana has clear teacher preparation standards to help articulate the special knowledge or skills required for teaching. Those standards include a set of standards for preparing ESL teachers. All teacher standards can be found at:
<http://www.doe.state.in.us/dps/standards/teacherindex.html>.

The State has provided several professional development opportunities to assist personnel in meeting State and local certification and licensing requirements for teaching limited English proficient students, such as collaborating with higher education institutions and other organizations to provide Continuing Renewal Units (CRUs) for participants. The IDOE has worked in partnership with the following:

- Indiana University's Interdisciplinary Collaborative Program to provide training for classroom teachers who work with LEP students by involving classroom teachers and language teachers in scientifically-based curriculum development, appropriate instructional and assessment strategies for LEP students, and the option of earning a 24-credit hour ENL certification through Indiana University's Department of Language Education;
- OKI Annual Regional English as a Second Language Conference (which includes southwestern Ohio, northern Kentucky, and southeastern Indiana) to provide sessions on effective instructional strategies for LEP students; and
- Marian College, a private local institution that is responding to the increasing language minority student population by improving its pre-service teacher training program in their School of Education.

In addition to these opportunities, the IDOE sponsors its own, highly successful, annual K-12 English as a Second Language Conference each spring for 500+ teachers throughout Indiana. Participants consist of mainstream, language, and ESL teachers, as well as administrators and other instructional personnel. Conference materials for the 2004, 2005, and 2006 spring conferences can be found at
<http://www.doe.state.in.us/lmmp/conferences.html>.

Working Conditions

The State plan to improve the conditions in hard-to-staff schools that contribute to excessively high rates of teacher turnover requires the use of State data as outlined in

the *Data and Reporting Systems* section of the Equity Plan. Indiana plans to collect comparative data from year-to-year on teacher departures from schools and then plans to cross-reference that information with average school salary and communicate with schools regarding event(s) or reason(s) that cause teachers to leave these schools.

In addition to working to locate more information about why teachers leave schools, the State funding formula includes a complexity index. If schools score high enough on this complexity index, they receive additional funds to help reduce disparities in resources according to need. There are five components of the complexity index: 1) percentage of population that is twenty-five years old or older with less than a twelfth grade education; 2) percentage of students eligible for free and reduced lunch; 3) percentage of LEP students; 4) percentage of families with single parents; and 5) percentage of families with children under eighteen below the poverty level.

Policy Coherence

The State plan also includes efforts to improve internal processes or to revise state policies that may inadvertently contribute to local staffing inequities. Listed below are the State initiatives that are currently implemented and plans for new implementation.

Current Implementation

1. Further Connecting Student and Educator Standards and Data.

Teacher Educating and Licensing Becomes Role of DOE; Seamless Data System Can Reveal Status, Best Practices of Teacher Preparation, Recruitment, Retention and Development—With Emphasis on High-Needs Schools

In an effort to more closely connect student and educator standards, the Indiana General Assembly in 2005 moved the Professional Standards Board, then a stand-alone agency, under the Indiana Department of Education. As of July 1, 2005, IDOE's new Division of Professional Standards became seamlessly attached to the state's public K-12 system under the leadership of the Superintendent of Public Instruction. Charged by the legislature with expanded responsibilities involving teacher educating as well as licensing, the Division of Professional Standards can now create and improve comprehensive data systems to collect and link information important to understanding the level of teacher quality in Indiana. Such data can provide important information on the status and best practices of teacher preparation, recruitment and retention, and professional development—all with added emphasis on high-need schools. Please see SB 371 (Became part of HEA 1001) <http://www.in.gov/legislative/bills/2005/IN/IN0371.1.html> and HB 1001 (State Budget 2006-2007) at: <http://www.in.gov/apps/lisa/session/billwatch/billinfo?year=2005&request=getBill&docno=1001>.

2. Recruiting Highly Motivated Minority Students to Choose Education Majors, Help Reflect Diverse Student Bodies in Many High-Needs Schools

Also in 2005, Indiana lawmakers included continued funding through 2007 for the ongoing Minority Teacher Scholarship Program. Originally created by the 1988 Indiana General Assembly, the program is designed to address the critical shortage of African-American and Hispanic teachers across Indiana. In 1990, Indiana lawmakers amended and expanded the program to include the field of Special Education. With the offer of scholarships ranging from \$1,000 to \$4,000 depending on financial need, lawmakers hope to recruit highly motivated minority students to choose education as a college majors and in some cases, special education, to help reflect the diverse student bodies of many high-needs schools. Recipients must maintain certain grade point averages and meet criteria established by the State Student Assistance Commission of Indiana. For more information, please see SSACI (State Student Assistance Commission of Indiana) at: <http://www.in.gov/ssaci/programs/m-teach.html>.

3. Carefully Reviewing Teacher Shortages by Content and Geography.

'Transition to Teaching' Program Expanded to Provide Highly Motivated, Highly Qualified Teachers to All Students and Schools Across Indiana

Data collected by the IDOE's Division of Professional Standards was instrumental in the 2006 passage of a new law calling for an ongoing, high-level review of teacher shortages—both in content areas and geographic areas—and an expanding of the state's Transition to Teaching program that previously had been part of Indiana's charter school law. Holding promise of providing highly motivated and highly qualified teachers in content and geographic areas to the state's high-needs schools, lawmakers were cautious to make certain this alternative certification route produced and did not avoid the hiring of already high quality teachers. Specifically, the law calls for the transition to teaching candidate be in the process of obtaining a teachers license in the given subject area and that the Transition to Teaching candidate only be hired by local administrators if no fully licensed and highly qualified teacher is available. Indiana's new Transition to Teaching law went into effect July 1, 2006. For more information, please see SEA 172 at: <http://www.in.gov/apps/lisa/session/billwatch/billinfo?year=2006&session=1&request=getBill&docno=172>.

4. Re-Establishing Teacher Mentoring.

Program Aims to Promote Confidence, Renewal Among Teachers; Reduce Taxpayer, Human Costs of Teacher Turnover; Strengthen Learning Relationships With Students

National studies show about one-half of teachers leave the profession within the first five years. Each year, teacher turnover costs America's schools an estimated one in ten education taxpayer dollars—with high-needs urban and rural districts hardest hit. All this is in addition to the human costs paid by students trying to learn. Nothing in our education system takes the place of a strong learning relationship between a teacher and a student. Because Indiana state government's first responsibility is to

provide for public schools, our first education priority must be supporting our classroom teachers. Effective induction and mentoring programs not only help new teachers acquire skills and resources to teach better, interestingly enough, students of experienced teachers who serve as mentors improve as well. Indiana law called for a teacher mentoring program, but the 2005-2006 state budget year did not provide resources to fund the system. Faced with these facts and this scenario, and despite the fact that 2006 was not a budget year for the Indiana General Assembly, lawmakers overwhelmingly passed a bill that included giving the Indiana Department of Education flexibility to promote confidence and renewal among educators, reduce costly teacher hiring and turnover, and promote stronger learning relationships between teachers and students by allowing transfers in the IDOE budget to fund these programs. HEA 1240 went into effect on July 1, 2006, and further stated that private funds donated to the department could also be used. Restoration of full-funding for the stipends will be part of the Department's budget proposal before the 2007 General Assembly. For more information, please see HB1240 at: <http://www.in.gov/apps/lisa/session/billwatch/billinfo?year=2006&session=1&request=getBill&docno=1240>.

5. Preparing and Placing High-Quality, Nurturing Principals.

Wallace Foundation Helps Indiana Attract and Place School Leaders Committed to Creating Climates that Nurture Teachers, so That Collectively They Improve High Achievement For All Students

With the help of the Wallace Foundation, Indiana continues to focus on the preparation and placement of high-quality principals, particularly minority candidates, in the state's lowest performing schools. The foundation remains committed to helping Indiana attract and place school leaders committed to creating climates that nurture teachers, so that collectively leaders and teachers improve high achievement for all students. This on-going effort involves examination and redesign of the state's 17 university preparation programs through the creation of model programs in four demonstration sites. The state is also working to provide incentive to minority administrators to work in the highest needs schools. Mini-grants to demonstration districts have established minority recruitment committees, identified promising minority candidates, and provided training and scholarships for aspiring minority teachers. The state is working with four constituent groups in the design and implementation of this work: the Indiana Urban Schools Association, Indiana Association of Public School Superintendents, Indiana Association of School Principals and the Indiana School Boards Association. This ensures voices of universities through organizations such as the Indiana Association for Career and Technical Education (Indiana ACTE) and local districts are strong in the program redesign. Additionally, the Indiana Principal Leadership Academy has served as a key resource to train 52 school improvement coaches. For more information, please see the following Web sites: http://www.wallacefoundation.org/WF/ELAN/SD/SAELP_IN/ and <http://www.doe.state.in.us/ipla/wallace/docs/2005-09-13-FWLEADPres-SAELP.pdf>.

Future Implementation

1. Add HQT to School Accreditation Requirements

In an effort to assure that all teachers in Indiana are highly qualified, the IDOE will ask the State Board of Education, the Indiana General Assembly, or the Professional Standards Advisory Board to make HQT an additional requirement for school accreditation. Under the school accreditation process, every school is formally reviewed on a three-year cycle. There are consequences, including an opportunity for students to transfer to another school corporation, if the school to which they are assigned by the corporation of legal settlement is on probation.

2. Consider Performance-Based, Career-Ladder Teacher Compensation Models to Recruit, Retain High-Quality Teachers

As a part of the differentiated staffing proposal, the State's current plan is to ask the General Assembly to repeal the minimum salary schedule law, which provides that a teacher's minimum salary each school year must be computed based on the teacher's education, experience, and degree completed as of the teacher's first day of service. This prevents local salary schedules from being based on anything other than training and experience. This consideration is based on the following information.

A single-salary teacher compensation model has remained in place in Indiana and across the nation for more than 50 years, according to Indiana University's Center for Evaluation and Education Policy (CEEP). Since shortly after World War II, the majority of school districts have based teacher pay on two factors: (1) the years of teaching experience and (2) the number of college degrees earned. This model reaches what some say are unfair conclusions about what makes a good teacher by distilling those qualities to merely two characteristics -- experience in the classroom and additional higher education. Critics point out the model fails to reward outstanding teaching methods, measure displayed expertise or encourage job enlargement to meet student and school needs.

In response to these and other criticisms, some policymakers in the late 1970s and early 1980s attempted replacing the existing single-salary structure with "merit pay." Because proposed merit pay models involved fixed amounts of bonus money and subjective administrator-led performance reviews, the common concern was that merit pay would result in a climate of competition not the collaboration needed among teachers.

Today's performance-based compensation models, in contrast to merit pay, seek to promote cooperation by offering incentive pay to all teachers who qualify. Teachers under performance-based compensation models work toward achieving a set of criteria openly determined by the local school or school district. However, such performance-based compensation plans are more complicated and require much thought and planning on the part of policymakers who must develop a salary structure

that rewards good teaching methods, recognizes professional development inside and outside the classroom, and fairly links teacher knowledge and skills with student academic growth.

PERFORMANCE-BASED COMPENSATION MODELS

Skills- or Competency-Based Pay: Works to measure and reward the knowledge and skills of teachers develop over the course of their career. Measured in areas of depth of the subject knowledge, expertise in instruction and curriculum development, or knowledge in areas such as guidance counseling or parent outreach (Kelley & Odden, 1995). Salary increases can be linked to the development of skills needed by the school district, licensure in additional content areas or national certification.

Performance-Based Pay: Reward teachers' performance measured against a set of standards developed by the school district. Performance ranges from student standardized test performance to teachers' additional responsibilities outside the classroom. Incentives for performance can be awarded to individual teachers or to groups of teachers. (Indiana law prohibits the use of ISTEP+ results to evaluate teachers.)

Pay At-Risk Performance Awards: Requires employees to put a certain portion of their base salary "at risk" until they meet established performance goals. Performance goals can be set by the school district and may include completing advanced training or having teachers work together to complete a task that is of great importance to the school or district (Kelley & Odden, 1995).

Group-Based Performance Awards: Encourages teachers to work cooperatively and to improve students' performance. Awards may be used for faculty and staff bonuses or for curriculum development or faculty and staff professional development opportunities (Kelley & Odden, 1995).

In addition to performance-based compensation methods, state and district leaders are developing career ladders to recruit and retain high quality teachers. Historically, to seek opportunities for promotion, increases in pay and responsibility, teachers were faced with leaving the classroom setting and entering administration. Often these same teachers were the highly qualified teachers who students needed most. Their departure to administrative roles took them from direct contact with students, leaving behind less qualified classroom teachers. Career ladders systems provide teachers with opportunities to take on new roles and responsibilities in addition to classroom teaching. Career ladders allow teachers to tackle curriculum development, supervising, mentoring, additional coursework, advanced degrees and national certification without taking them from the students who need them most.

CAREER-LADDER COMPENSATION MODELS

Performance-Based Ladders: Allows teachers to take on more responsibility as they

demonstrate their abilities to do so. Teachers may progress through a series of levels that may include novice teacher, career teacher, and master teacher (NASBE, 2002).

Job-Enlargement Ladders: Allows teachers to take increased responsibility for non-classroom activities. Such activities may include curriculum development, supervising and mentoring beginning teachers, and serving as a professional development trainer or lead teacher (NASBE, 2002).

Professional Development Ladders: Determine advancement based on the amount of additional knowledge and skills teachers develop over the course of their career. Skills may be obtained through university coursework, professional development activities, advanced degrees or national certification (NASBE, 2002).

Key lawmakers and policymakers across Indiana are particularly interested in the Milken Teacher Advancement Program (TAP) as a model to recruit and retain highly qualified teachers –especially in hard-to-staff schools.

The Milken Family Foundation Teacher Advancement Program is a performance-based compensation program that is being implemented in several states and districts around the country. TAP was created to accomplish what Indiana leaders are committed to doing: attracting and retaining quality teachers. TAP consists of four elements: (1) Multiple Career Ladders, (2) Ongoing Applied Professional Growth, (3) Instructionally Focused Accountability, and (4) Performance-based Compensation. According to compilation studies conducted by CEEP at Indiana University, TAP allows teachers to explore career options while staying in the classroom. Teachers can become part of the leadership team by taking positions as master or mentor teachers. The leadership team evaluates teachers and sets annual goals for staff and students.

TAP allows teachers time during the school day to plan and meet with other teachers for professional growth. Master or mentor teachers lead the group sessions to address goals and facilitate the growth of newer, less experienced teachers. Certified evaluators assess teachers four to six times per academic year. Teachers are compensated based on their roles, responsibilities, evaluations, and student success. Teachers are also compensated for working in hard-to-staff schools.

Seven schools in Arizona implemented the Milken TAP program during the 2000-01 and 2001-02 school years. In order to determine TAP's effectiveness, control schools from Arizona were also chosen – initially matching the TAP schools in achievement, school size, percent minority, school configuration, and location. Student achievement in both TAP and control schools was measured utilizing the Stanford Achievement Test for students in Grades 2-8. The Stanford Achievement Test is designed to measure students' abilities in reading, language arts and mathematics. Between 2000 and 2003, the majority of Arizona's TAP schools outperformed control schools in all categories by a margin of nine to 46 percentage points (Schacter et al., 2004).

In South Carolina, CEEP reports three elementary and three middle schools implemented TAP beginning in 2002. As in Arizona, a control group was selected for comparisons. CEEP reports TAP schools in South Carolina saw similar results to TAP schools in Arizona. In mathematics, four of the TAP schools outperformed control schools by 14 to 27 percentage points. Additionally, three of the TAP schools outscored the control schools in reading/languages arts by six to twenty-six percentage points (Schacter et al., 2004).

These positive results of TAP in Arizona and South Carolina—and other performance-based and career-ladder compensation modes across the nation—have the attention of Indiana leaders as they privately draft and publicly discuss legislation for their upcoming 2007 budget session of the Indiana General Assembly. Indiana's Governor, State Superintendent of Public Instruction and key lawmakers are committed to jointly proposing and funding a compensation model that will recruit and retain highly qualified teachers in all classrooms across the state, beginning with hard-to-staff schools.

3. Indiana's High School Re-Design Legislation to Better Prepare STEM Graduates Will Start With Highly Skilled, Highly Qualified Teachers

Education and government leaders across Indiana understand advances in science and engineering are essential for ensuring the state's economic growth. U.S. demand for scientists and engineers is expected to increase at four times the rate of all other occupations. Unfortunately, America's high school students are not performing well in math and science and fewer of them are pursuing degrees in technical fields. States like Indiana see an opportunity to close this alarming gap.

That's why Indiana's award-winning proposal to the National Governors Association's Office of Best Practices focused last year on "From Middle School Algebra To a Science, Technology, Engineering, and Math-Ready Graduate." We know that state investment in K-12 STEM education will help keep our economy competitive nationwide and worldwide. Without more public funds invested in STEM, Indiana leaders fear there can be little to no basis for future high-paying job growth. National projections support their fears and efforts. Of the fastest-growing occupations projected through 2010, the U.S. Bureau of Labor Statistics concludes that 14 of them will require substantial mathematics or science preparation. Indiana's NGA plan to bolster high school STEM education is expected to be the basis for high-school reform legislation in the upcoming 2007 budget session of the Indiana General Assembly. Preparing highly skilled, highly qualified teachers will be the start of that redesign effort.

As a result of winning the NGA grant, Indiana is stimulating its communities to consider proposals for new, effective STEM high school models. Those communities and schools responding are forming into networks clustering around various models, for example, student-centered technology-enabled models and early college models. In addition to the NGA monies, Indiana leaders are showing further commitment to this effort by raising an additional \$1 million from a philanthropic source to support

planning grants for communities and districts committing to such high school redesigns. The state's proposal not only bolsters STEM education, but is based on building a foundation of better teacher preparation and greater accountability for student success on the part of STEM teachers.

STEM advocates are encouraging state public colleges and universities to help develop incentives for future teachers to acquire a second STEM-related (science, technology, engineering or mathematics) major in addition to education. Also, with the help of mathematics departments and schools of education, Indiana is on the threshold of developing a statewide curriculum for bringing Indiana's current math teachers up to subject matter mastery. Similar efforts are to be made with science, technology and engineering departments. Through financial and academic incentives to be considered as part of the 2007 state budget session, legislators foresee encouraging more education students to also major in STEM-related areas and more existing teachers to develop subject matter mastery beginning as early as 2008. Lawmakers and policymakers know that better preparation of high school STEM graduates will first require highly skilled, highly qualified teachers.